

U.S. DEPARTMENT OF COMMERCE

Used Extensively As Domestic Fire

Formerly the economical disposal of the sawdust produced by the Canadian lumber industry presented a serious problem in most parts of the country, but to-day the use of this one-time waste material for domestic heating affords Canadians in regions contiguous to sawmills an opportunity to further practical conservation and utilization of waste material.

The sawmills of Canada are estimated to produce more than two hundred million cubic feet of sawdust annually, or the equivalent of a thin one-quarter of a mile square and more than one hundred feet high. After making allowance for the amount used by the sawmills for fuel to provide power and for other purposes, the quantity still available is not likely to be less than one hundred million cubic feet a year.

For home-heating purposes sawdust is burned in an attachment fitted with little difficulty and at moderate cost to any ordinary type

domestic furnace or boiler. Other types are available for use with stoves and kitchen ranges. The attachment consists of a set of special grates and a hopper to hold a supply of sawdust. The fuel feeds by gravity on to the grates from the hopper. The whole operation of stoking and combustion being accomplished without the use of any mechanical appliances. Two or three loadings of the hopper each day are usually sufficient, excepting in the most severe weather.

Some of the features which make sawdust a desirable fuel are its steady burning, its quick response to freedom in draught, its comparative freedom from ash, and its relative cleanliness. It may be burned green as it comes from the log or after it has been dried for a time. The drier the saw-

Sawdust has long been an excellent domestic fuel in British Columbia.

Anti-Toxin For Flu

Research Is Opening Path Toward Warding Off Epidemic

A little dry powder that may be the best yet toward immunity to human beings against influenza was described to the American Society of Bacteriologists at Baltimore.

The potent stuff—one-tenth of a milligram kills a rabbit—opens a path toward warding off such a war.

The new anti-toxin is as killing as untold thousands in 1918.

From the type of indigenous bacteria, Dr. Rene J. Dubos of the Hospital of the Rockefeller Institute for

Medical Research, New York, developed a dry, stable soluble powder of the toxic substances which those bacteria produce. This powder is free of bacteria itself.

Mixtures of this powder with killed immunized rabbits, made these completely resistant to the live influenza bacteria.

The toxin, as yet produced only in small quantity, has not been tried on humans. Dr. Dubos said, nor even on monkeys, but he is sceptical to influenza epidemics like men. But it is a significant step toward an anti-toxin for humans.

One theory, Dr. Dubos said, is that the 1918 epidemic was caused by both a filterable virus and bacteria with a synergistic property responsible for swift spread of the disease.

A previous investigator has found that either the virus or bacilli alone produced only mild influenza in swine, but that together they team

Had Exciting Life

Francis Birtles, the Australian author and composer, who died recently in Sydney, crossed Australia 83 times, covered 500,000 miles, opening the Australian wilds, drove a car from England to Australia and was the first man to drive from Calcutta to Rangoon.

Lends In Photos

King George in the most photographed man in the ministry of information's collection of 350,000. Prime Minister Churchill is next just ahead of Hitler and the Duke of Kent.

It takes 46 years, for light from the star Arcturus to reach the earth with light travelling at 186,000 miles a second.

His Majesty's Canadian ship *Chippewa* will never feel the splash.

Sheep can eat mineral fertilizer and change it into meat, experiments at the University of Illinois show.

